

**CITY OF LODI  
INFORMAL INFORMATIONAL MEETING  
"SHIRTSLEEVE" SESSION  
CARNEGIE FORUM, 305 WEST PINE STREET  
TUESDAY, DECEMBER 6, 2005**

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, December 6, 2005, commencing at 7:05 a.m.

**A. ROLL CALL**

Present: Council Members – Hansen, Hitchcock, Johnson, Mounce, and Mayor Beckman

Absent: Council Members – None

Also Present: City Manager King, City Attorney Schwabauer, and City Clerk Blackston

**B. TOPIC(S)**

**B-1 "Review conceptual Water Meter Retrofit Program"**

Public Works Director Prima reported that 16 water meters have been installed on residential units in the community for the purpose of gathering data on variations of water usage. He explained that services prior to 1979 would need to be modified to accept a meter, services installed from 1979 to 1992 are ready to accept a meter, and homes built after 1992 have already paid for a water meter. Mr. Prima displayed a water meter and confirmed that they would be read electronically and would last from 10 to 15 years. Replacing meters and batteries would become a part of an ongoing program. Currently, the City is out to bid for a contractor to install a pilot group of 400 meters. The City would not begin charging metered rates until next fiscal year. Staff recommends that modifying services to accept a meter would be a utility cost. It is estimated that the program could be accomplished over a 20-year period without raising rates.

In reply to Mayor Pro Tempore Hitchcock, Mr. Prima stated that water rates would need to be increased 30% to 40% for the program to be completed in three years.

Council Member Hansen felt that 20 years was too long and suggested that the program be completed by 2012 at the latest. He believed that meters would also help to conserve water, which is greatly needed due to the declining water table. He asked staff to bring back various alternatives to expedite the program.

Council Member Johnson suggested that one alternative could be that everyone pays for their own hook up.

Mayor Beckman recommended that meters be installed as soon as possible on the 5,700 homes that have meter boxes and begin with those who have already paid for the meters.

Mr. Prima noted that if a meter is in place the State requires that commodity rates be charged by 2010.

In response to Council Member Mounce, Mr. Prima confirmed that the water main replacement project includes the cost for modifications to accept water meters. If property owners are charged for the modifications it would be a cost savings to the replacement program.

Council Member Mounce pointed out that the highest cost would be to those who live in the older sections of Lodi, many of which have limited incomes. She felt it was unfair to penalize certain homeowners because of the City's aging infrastructure.

Mr. Prima noted that one of the key components of the water main replacement program is to relocate water lines from rear yards to the street. If retrofitting for water meters is done on an expedited basis, there will be areas that still have a rear yard service and the meter would have to be installed in that location. If the two programs were more closely linked there would be a cost savings in the long run by not installing meters in rear yards and then later having to relocate it when the main is moved to the street.

Mayor Pro Tempore Hitchcock asked to be provided with data regarding the percentage of homeowners and renters on the east side.

PUBLIC COMMENTS:

- Eileen St. Yves recalled this issue being discussed with Council 20 years ago. She believed that water meters would conserve water and was in favor of expediting the program. She noted that it has been the policy of the City to collect water and sewer fees on vacant housing units. She expressed support for placing sub-meters on apartments for water used in landscaping and pools.

**C. COMMENTS BY THE PUBLIC ON NON-AGENDA ITEMS**

None.

**D. ADJOURNMENT**

No action was taken by the City Council. The meeting was adjourned at 8:02 a.m.

ATTEST:

Susan J. Blackston  
City Clerk

## AGENDA ITEM



# CITY OF LODI COUNCIL COMMUNICATION

**AGENDA TITLE:** Review Conceptual Water Meter Retrofit Program

**MEETING DATE:** December 6, 2005 (Shirtsleeve Session)

**PREPARED BY:** Public Works Director

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**RECOMMENDED ACTION:** That the City Council review the recommended conceptual water meter retrofit program and give staff comment on finalizing the policy.

**BACKGROUND INFORMATION:** State law now requires that new water services be both metered and the customer be charged based on water usage. In addition, as part of the public comments on recent water rate increases, the City received numerous comments on the unfairness of our current bedroom-based flat-rate system.

The Council has previously authorized solicitation of bids for purchase and installation of a "pilot" group of approximately 400 meters. The main purpose of the pilot project is to gather a large sample of consumption data and to "test" our rate structure. Increasing (or decreasing) revenue is not the purpose of metering; rather, the purpose is to promote water-use awareness and conservation and to fairly distribute water utility costs to the users. The pilot project will also test our own systems and practices and will include use of automated meter-reading equipment.

Given the high total cost of a retrofit program – over \$15 million - staff is proposing that the retrofit program be done over the maximum time allowed by the State (to January 1, 2025). The cost estimate is shown in Exhibit A. The estimate shows three service conditions and two alternatives:

- Pre-1979 services which would need to be modified to accept a meter – this is the largest group and the most expensive to retrofit.
- 1979-1992 services which are ready to accept a meter (this also includes just over 500 services which have been installed as part of the water main replacement program).
- Post-1992 services which are ready for a meter and the customers (typically the developer or initial home-builder) have paid for a meter.
- One alternative is to replace/upgrade the entire service when installing a meter. This is substantially more expensive than the second alternative and is not recommended.

In addition to actually installing meters, transitioning from flat rates to metered rates over time raises a number of implementation issues and policy questions. Exhibit B, in question and answer format, raises these issues and provides rationale for the recommended policy. In brief, the main points are:

- Customers will be charged metered rates as the meters are installed starting in FY 2006/07 (after results from the pilot program are analyzed). The main implication of this policy element is that we will have a mix of both metered and flat-rate customers for many years.

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APPROVED: \_\_\_\_\_

Blair King, City Manager

- Customers at locations for which the meter has not been paid for will be charged the cost of the meter. The water utility will bear the cost of upgrading the water service, except in development related circumstances, per past and current City ordinance.
- Meters will be installed on a systematic basis in a pre-determined annual schedule through 2024, which will be established as part of the pilot program.

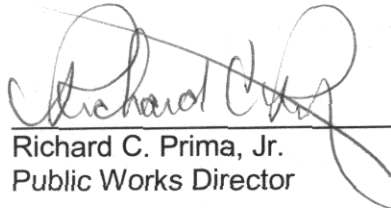
Many other details are included in Exhibit B. Following Council review and comment, staff will prepare a more formal policy document for final approval at a later date.

**FISCAL IMPACT:**

Based on current estimates, the average annual cost of this program to the Utility, in current dollars, is \$580,000, assuming all customers pay the meter cost and the Utility pays the service upgrade costs. These costs will be refined once we have bids for meters and installation. Assuming the

City continues to adjust water rates annually to account for inflation and no other significant and unavoidable capital expenses occur, this program can be accomplished within our current rate structure.

**FUNDING AVAILABLE:** Not applicable.



Richard C. Prima, Jr.  
Public Works Director

RCP/pmf

Attachments

## Water Meter Retrofit Estimated Implementation Costs

| Existing Water Service Configurations:                  |                  |           | No. of Connections |             |
|---|------------------|-----------|--------------------|-------------|
| Connections with Water Shut Off Valves Only             | Pre - 1979       |           | 10,948             |             |
| Connections w/ Meter Boxes Only                         | 1979-1992        |           | 2,530              |             |
| Connections w/ Paid Meters and Meter Boxes              | 1992-Present     |           | 3,224              |             |
| Connections w/ Service Upgrades Incl. Meter Box         | Main Rplc. Prog. |           | 540                |             |
| Total Current Estimated Un-metered Connections:         |                  |           | 17,242             |             |
| Install AMR Water Meters:                               |                  |           |                    |             |
| (Alternate 1: Install New Water Service)                | Units            | Unit Cost | Total              |             |
| Upgrade Service, Install Box & Meter (Meters Unpaid)    | 10,948           | \$ 1,800  | 19,706,400         |             |
| Purchase and Install Meters (Meters Unpaid)             | 2,970            | \$ 350    | 1,039,500          |             |
| Purchase and Install Meters (Meters Paid)               | 3,224            | \$ 350    | 1,128,400          |             |
| Total Estimated Cost to Meter All Connections           |                  |           | \$                 | 21,874,300  |
| Less Meter Charge to Individual Customers*              | 13,918           | \$ 350    | \$                 | (4,871,300) |
| Net Costs   |                  |           | \$                 | 17,003,000  |
| Install AMR Water Meters:                               |                  |           |                    |             |
| (Alternate 2: Using Existing Service)                   | Units            | Unit Cost | Total              |             |
| Use Exist. Service, Install Box & Meter (Meters Unpaid) | 10,948           | \$ 1,200  | 13,137,600         |             |
| Purchase and Install Meters (Meters Unpaid)             | 2,970            | \$ 350    | 1,039,500          |             |
| Purchase and Install Meters (Meters Paid)               | 3,224            | \$ 350    | 1,128,400          |             |
| Total Estimated Cost to Meter All Connections           |                  |           | \$                 | 15,305,500  |
| Less Meter Charge to Individual Customers*              | 13,918           | \$ 350    | \$                 | (4,871,300) |
| Net Costs   |                  |           | \$                 | 10,434,200  |
| Annual Cost for Program over:                           |                  |           | 18 years           | \$ 580,000  |

\* assumes individual customers will pay meter surcharge for their meter

Final deadline for installation is Jan. 1, 2025

**City of Lodi Water Meter Retrofit Program**  
**Policy Questions and Staff Comments/Recommendations**  
 November, 2005

**1. Why are we proposing a water meter retrofit program?**

- ◆ *First, this is a State mandate. (See Water Code §527 attached)*

*Second, this is the only fair way to allocate costs of providing water service to the City's customers. With the last water rate increase, numerous customers protested the per-bedroom flat-rate scheme currently in place and requested a more equitable billing method. Even without the State mandate, staff would be recommending some form of a meter retrofit program.*

**2. Implementation Time Frame – Should we retrofit meters all at once or over time?**

- ◆ *Staff recommends the City retrofit meters over the full time allowed by the State, which is until Jan. 1, 2025. With approximately 17,000 customers to be metered, this means just under 1,000 services per year. Approximately 3,400 have already paid for a meter and an estimated additional 3,000 have services ready to accept a meter. These installations will cost approximately \$325 each. The remaining 10,000+ services will need to have the service modified to accept a meter at a cost of approximately \$1,200 each, in addition to the meter charge.*

*Aside from spreading the cost, another advantage in doing the installations over time is that future replacements will also be staggered rather than create a situation in which 17,000 meters need to be replaced at once.*

**3. Billing with Commodity Rate – Should we start charging metered customers based on usage or wait until all customers are metered?**

- ◆ *Staff recommends we start charging based on usage as meters are installed after the initial "Start Date" (See Question #5). State law requires that any services which have meters, be charged based on usage by January 1, 2010. Since there will be many customers still un-metered by that date, staff does not see any value in delaying.*

**4. Cost of Retrofit – Who should pay the cost for installing meters?**

- ◆ *Past policy and practice has been that the customer pays the cost of a meter. For new services and with property development, the property owner or developer also pays the cost of installing or upgrading the water main, service, etc. As the City replaces mains and services due to age or other circumstances, the new service is ready for a meter. Staff recommends that this practice continue and that for the meter retrofit program, the Water Utility bear the cost of upgrading the service as meters are installed and the customer pay the cost of the meter, with the development exceptions per current practice and per Question #5.*

**5. How will we prioritize who gets a meter sooner rather than later?**

- ◆ *Following installation of the 400 "pilot project" meters, analysis of data and review of metered rates versus flat rates, staff recommends the following, assuming an 18-year program with a "Start Date" in mid FY 2006/07:*
  - a) *All new services and upgrades as a result of development, meter and charge immediately upon installation.*

- b) *For customers who have already paid for a meter, start with the newest customers first and work backward to the oldest – this will take approximately 3 years. This would include those customers in the pilot program, as they have already paid for a meter.*
- c) *Next, install meters on services initially installed ready to accept a meter, working subdivision by subdivision, newest to oldest – will take another 3 years. (Note – given the age of these services, many will require some work to reset boxes to make them ready to take a meter.)*
- d) *For all remaining customers – break the City into 12 sub-areas roughly equal in number of customers, establish a priority order based on a random selection, and proceed in that order.*

**6. Citizen Requests – What if a customer requests a meter ahead of schedule?**

- ◆ *Based on the priority system established in Q #5, the City will have a known priority and estimated year of installation for all customers. For a customer to jump ahead of schedule, staff recommends that they pay the cost of the meter and a prorated amount for the service upgrade based on when they were programmed to receive a meter and when the request is made. For example, if a customer is slated to receive a meter in year 10 of the 18-year program, and wants the meter in year 2, then they would pay 44% of the cost of service upgrade. If they were programmed to receive a meter in the last year of the program and wanted it in the first year, they would pay 100%. (See Table.)*

*If a customer has already paid for a meter, but per Question 5 a) is slated to receive a meter in the second or third year, staff recommends we accommodate the request.*

**7. What about the remaining flat-rate commercial customers?**

- ◆ *For purposes of the retrofit policy, the few hundred non-residential customers would be included in the program as if they were a residential customer.*

**8. Who decides what size meter gets installed?**

- ◆ *The City and the customer should collaborate on the meter size, but the City should have the final say. Larger meters cost more to replace and if too large for the flow, they will under-read which is unfair to the rest of the customers. If a customer needs a larger meter, the customer will need to pay for the larger meter, less a credit for the smaller meter, on a 15-year proration. Our current policy is 5 years.*

**9. What happens if a customer requests a meter then later decides they don't want it?**

- ◆ *Staff recommends that this program be a one-way deal...there's no going back...*

**10. What about buildings with multiple tenants – if the City currently bills each unit, what happens then?**

- ◆ *With metered service, there will be one bill for each meter. The owner will need to decide how to handle this cost.*

**11. Should there be a grace period for metered charges?**

- ◆ *While State law does allow for a one-year "grace" period in which the customer could continue to pay a flat rate while seeing what the metered charge would be,*

*the City's billing system is not capable of handling this type of "either/or" billing. To mitigate the possible impact of high bills, staff recommends that for retrofit customers, metered billing be started during the months of October through April when water use is generally lower. For new development, metered billing would start with the new service.*

**12. How much will individual meters cost?**

- ◆ *The current charge for an individual standard size meter, including installation into an existing meter box, is \$325. Future costs will depend on meter prices and installation bids, which may vary. This charge could be reduced or stabilized for the retrofit program, should the Council so desire, which would mean all customers would be helping to defray the cost of the retrofit program as they do for other State mandates.*

**13. How does this program fit with the infrastructure replacement program?**

- ◆ *They would be handled separately, although the priorities for the replacement program might be affected. The replacement program includes replacement of services when the water main serving the parcel is relocated, typically from a rear-yard easement to the street. That new service is ready for a meter. By creating the priority scheme in Question #5, there is no advantage or disadvantage to the customer for being in one of the replacement areas.*

**14. Will customers need to pay the meter cost all at once?**

- ◆ *That would be the simplest from an administrative standpoint; however the Council could authorize some mechanism to spread out the cost. Policies regarding interest, incomplete payments, etc., would need to be developed.*

**15. When a customer has paid for a meter, can they "take it with them" if they move?**

- ◆ *No, the meter is part of the water service for a particular parcel and stays with the parcel.*



**Customer Request Proration Table** – applies to service upgrade cost only, not meter cost

**City of Lodi Water Meter Retrofit Program**

**Proration for Installation Request (Customer pays % indicated toward service upgrade cost)**

| <b>Programmed Year:</b>   |    | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---------------------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Programmed Year #:</b> |    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   |
| <b>Request</b>            |    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| <b>Year:</b>              |    | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|                           | 1  | 0%   | 6%   | 12%  | 18%  | 24%  | 29%  | 35%  | 41%  | 47%  | 53%  | 59%  | 65%  | 71%  | 76%  | 82%  | 88%  | 94%  | 100% |
|                           | 2  | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  | 61%  | 67%  | 72%  | 78%  | 83%  | 89%  |
|                           | 3  | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  | 61%  | 67%  | 72%  | 78%  | 83%  |
|                           | 4  | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  | 61%  | 67%  | 72%  | 78%  |
|                           | 5  | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  | 61%  | 67%  | 72%  |
|                           | 6  | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  | 61%  | 67%  |
|                           | 7  | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  | 61%  |
|                           | 8  | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  | 56%  |
|                           | 9  | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  | 50%  |
|                           | 10 | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  | 44%  |
|                           | 11 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  | 39%  |
|                           | 12 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  | 33%  |
|                           | 13 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  | 28%  |
|                           | 14 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  | 22%  |
|                           | 15 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  | 17%  |
|                           | 16 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   | 11%  |
|                           | 17 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   | 6%   |
|                           | 18 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0%   |

Examples: Customer programmed to receive meter in 2020 (Year 14 of Program) requests meter in 2010 - Customer pays 56% of service upgrade cost  
 Customer programmed to receive meter in 2024 (Last year Program) requests meter in 2012 - Customer pays 67% of service upgrade cost

## **WATER CODE**

### **SECTION 525-529.5**

525. (a) Notwithstanding any other provision of law, every water purveyor who sells, leases, rents, furnishes, or delivers water service to any person shall require, as a condition of new water service on and after January 1, 1992, that a suitable water meter to measure the water service shall be installed on the water service facilities in accordance with this chapter. The cost of installation of the meter shall be paid by the user of the water, and any water purveyor may impose and collect charges for those costs.

(b) Subdivision (a) applies only to potable water.

(c) Subdivision (a) does not apply to a community water system which serves less than 15 service connections used by yearlong residents or regularly serves less than 25 yearlong residents, or a single well which services the water supply of a single-family residential home.

526. (a) Notwithstanding any other provision of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract executed pursuant to Section 485h(c) of Title 43 of the United States Code with the Bureau of Reclamation of the United States Department of the Interior shall do both of the following:

(1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings constructed prior to January 1, 1992, located within its service area.

(2) On and after March 1, 2013, or according to the terms of the Central Valley Project water contract in operation, charge customers for water based on the actual volume of deliveries, as measured by a water meter.

(b) An urban water supplier that receives water from the federal Central Valley Project under a water service contract or subcontract described in subdivision (a) may recover the cost of providing services related to the purchase, installation, and operation and maintenance of water meters from rates, fees, or charges.

527. (a) An urban water supplier that is not subject to Section 526 shall do both the following:

(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

(2) (A) Charge each customer that has a service connection for which a water meter has been installed, based on the actual volume of deliveries, as measured by the water meter, beginning on or before January 1, 2010.

(B) Notwithstanding subparagraph (A), in order to provide customers with experience in volume-based water service charges, an urban water supplier that is subject to this subdivision may delay, for one annual seasonal cycle of water use, the use of meter-based charges for service connections that are being converted from nonvolume-based billing to volume-based billing.

**(b) A water purveyor, including an urban water supplier, may recover the cost of providing services related to the purchase, installation, and operation of a water meter from rates, fees, or charges.**

528. Notwithstanding Sections 526 and 527, any water purveyor that becomes an urban water supplier on or after January 1, 2005, shall do both the following:

(a) Install water meters on all municipal and industrial service connections located within its service area within 10 years of meeting the definition of urban water supplier.

(b) (1) Charge each customer for which a water meter has been installed, based on the actual volume of water delivered, as measured by the water meter, within five years of meeting the definition of urban water supplier.

(2) Notwithstanding paragraph (1), in order to provide customers with experience in volume-based water service charges, an urban water supplier that is subject to this subdivision may delay, for one annual seasonal cycle of water use, the use of meter-based charges for service connections that are being converted from nonvolume-based billing to volume-based billing.

(c) For the purposes of this article, an "urban water supplier" has the same meaning as that set forth in Section 10617.

**529. (a) This article addresses a subject matter of statewide concern.**

**(b) Subject to subdivision (c), this article supersedes and preempts all enactments, including charter provisions and amendments thereto, and other local action of cities and counties, including charter cities and charter counties, and other local public agencies that conflict with this article.**

**(c) This article does not supersede or preempt any enactment or other local action that imposes additional or more stringent requirements regarding matters set forth in this article.**

529.5. On and after January 1, 2010, any urban water supplier that applies for financial assistance from the state for a wastewater treatment project, a water use efficiency project, or a drinking water treatment project, or for a permit for a new or expanded water supply, shall demonstrate that the applicant meets the requirements of this article.